

Title (en)  
IMPROVED SPRING ACTIVATED HEMOSTATIC CLIP APPLICATOR

Publication  
**EP 0112980 A3 19860326 (EN)**

Application  
**EP 83109885 A 19831004**

Priority  
US 43302882 A 19821006

Abstract (en)  
[origin: EP0112980A2] A surgical clip applying device having a main body, a clip magazine coupled to the main body for holding a plurality of clips, clip deforming jaws coupled to the main body for receiving and deforming clips, a clip loading mechanism for loading clips from the magazine to a clip feed blade which moves clips from the clip magazine to the deforming jaws, and a spring activated actuating mechanism. The clip loading mechanism includes a double ratchet apparatus coupled to a pawl for advancing the clips through the magazine. The actuating mechanism includes handle portion, a ratchet member having a cam follower which is coupled to a camming surface which is in turn coupled to one of the handle portions, a spring connected to the main body and the ratchet member, and a latch adapted to engage the ratchet member. By movement of one of the handle portions with respect to the other handle portion, the camming surface engages the cam follower to store energy in the spring, which is retained therein via engagement of the latch with the ratchet member. In operation, a slight movement of one of the handle portions with respect to the other handle portion disengages the latch from the ratchet member so that the energy stored in the spring is converted into rapid forward movement of the clip feed blade. This forward movement causes the clip loading mechanism to advance a clip and, in addition, causes the clip feed blade to slide through the magazine to rapidly place a clip in the deforming jaws.

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**A61B 17/12**

IPC 8 full level  
**A61B 17/12** (2006.01); **A61B 17/128** (2006.01)

CPC (source: EP US)  
**A61B 17/128** (2013.01 - EP US)

Citation (search report)  
• [X] GB 2074030 A 19811028 - SENCO PRODUCTS  
• [A] GB 2088723 A 19820616 - ETHICON INC  
• [A] US 3006344 A 19611031 - VOGELFANGER ISAAC J  
• [A] US 2968041 A 19610117 - SKOLD JOHN F  
• [AD] EP 0000875 B1 19810916  
• [AP] EP 0087942 A2 19830907 - ETHICON INC [US]  
• [AP] EP 0087938 A2 19830907 - ETHICON INC [US]  
• [A] US 3638847 A 19720201 - NOILES DOUGLAS G, et al

Cited by  
EP0469524A1; CN102090912A; EP0286921A1; US5792150A; EP0656190A3; EP0738500A3; EP1322233A4; US5330487A; CN104367363A; EP1609427A1; EP1378203A1; EP1317906A1; EP0769275A1; EP0507537A1; US10470765B2; US8529588B2; WO0228268A2; US9289213B2

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DOCDB simple family (application)  
**EP 83109885 A 19831004**; CA 426206 A 19830419; DE 3381281 T 19831004; JP 22472093 A 19930909; JP 4567995 A 19950306; JP 8321986 A 19860410; JP 8834283 A 19830519; US 43302882 A 19821006